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Performance Oriented Packaging (POP) Testing of Charge, Proof, 155MM, PXR-6297Al, Packed one							
per PA 103 Square Rim Metal Ammunition Container							
12. PERSONAL AUTHOR(S) Raymond J. Siroy							
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	3. PA 103 Meta 4. Packaging	al Ammunition Container					
19. ABSTRACT (Continue on reverse if necessary		umber)					
This Performance Oriented Packaging (POP) report is for the Proof Charge, 155MM, PXR-6297Al,							
packed one per PA 103 Square Rim Metal Ammunition Container in accordance with drawing 12902708. This report describes the results of testing conducted on a similar packaging							
which is used as an analogy for this item.							
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SECURITY CLASSIFICATION OF THIS PAGE

I. Report Number: DOD POP HMTR/AYD 93-031

II. Title: Performance Oriented Packaging (POP) testing of Charge, Proof, 155 MM, PXR-6297A1, Packed One per PA103 Square Rim Metal

Ammunition Container

Drawing Number: 12902708

Author: Raymond J. Siroy

Performing Activity: U.S. Army Armament Research, Development

and Engineering Center (ARDEC)

Address: Department of the Army

Commander, U.S. Army ARDEC

Attn: SMCAR-AEP

Picatinny Arsenal, N.J. 07806-5000

Date: December 1993

Distribution Statement A.

Approved for public release; distribution is unlimited.

1. DATA SHEET:

a. CONTAINER

Type: Removable head steel drum

UN Code: 1A2

Part Number: 9349398

Spec Number: MIL-C-63461

Material: Steel

Capacity: 19.0 liters

Dimensions:

Inside Diameter = 6.50 in. min. Outside Diameter = 7.49 in. max.

at Flat Side

Inside length = 35.06 in. min. Outside Length = 37.99 in. max.

Closure (Method/Type): Cover shaft is locked into slots on container rim.

Tare Weight: 6.9 kg (15.3 lbs)

b. PRODUCT

Name: Charge, Proof, 155 MM, PXR-6297A1 for HOW M198

United Nations Proper Shipping Name: Charges, Propelling, for Cannon

United Nations Number: 0242 Drawing Number: 12598573

Physical State: Solid

United Nations Packing Group: II

Amount Per Container: 1

2. BACKGROUND, TESTS, AND RESULTS:

The Department of Transportation (DOT) per Code of Federal Regulations (CFR), Title 49, Parts 100-180, dated 1 Oct 92, requires that Hazardous Materials should be packed in a container that passes the Performance Oriented Packaging (POP) tests.

The PA103 Square Rim Metal Ammunition Container reference 1a, is used as the shipping container for the Proof Charge, 155 MM, PXR-6297A1 packed in accordance with drawing 12902708.

Reference the following documents:

- a. Code of Federal Regulations, Title 49, Dated Oct. 1 1992.
- b. POP Report DOD POP HMTR/AYD 92-003

Instead of testing the specific container used for the Proof Charge, 155 MM, PXR-6297A1 in accordance with drawing 12902708, the metal container is certified to meet the requirements of the Code of Federal Regulations (CFR), Title 49, based on a previously tested PA116 Square Rim Metal Container which has the following weight and dimensions:

Gross Weight: 75.4 pounds (34.2 kg) Dimensions:

Inside Diameter = 6.75 in. min.

Outside Diameter = 7.75 in. max.

at Flat Side

Inside length = 41.50 in. min.

Outside Length = 44.50 in. max.

Stacking Test, Loose Cargo Test and Four Foot Drops were conducted in accordance with Reference 2b. The results indicated no leakage or spillage of contents from the metal container following any of the tests, thus satisfying the requirements of the 49 CFR. This falls within the guidelines for analogy IAW Variation 3 of Para. 178.601(g)(3) of Reference 2a.

3. CONCLUSION:

Based upon the above POP testing, the following UN POP symbol has been applied to the PA103 Square Rim Metal Container in accordance with drawing 12902708.



** Last two digits of year packed.

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